

## **REMARKS**

Claims 1-4, 6-19, and 27-38 are pending, of which claims 8-19 have been withdrawn from consideration in the present application, and claims 1-4, 6-7 and 27-38 have been rejected. Applicant respectfully requests the allowance of claims 1-4, 6, 7 and 27-38.

### **Request to Reconsider or Withdraw Holding of Finality**

The Applicant respectfully requests that the Examiner reconsider, and withdraw, the finality of her rejection. It appears that the Examiner has not adequately addressed at least claims 27-37.

Applicant added claims 27-38 in the Amendment submitted on 21 July 2008. However, Applicant has been unable to identify any substantive address of claims 27-37 by the Examiner in any subsequent Office Actions.

Applicant therefore respectfully requests that the Examiner withdraw the finality of her rejection in order to give claims 27-37 their due consideration.

### **Interview Summary**

The undersigned attorney thanks the Examiner for the telephonic interview conducted on 11 March 2009. During the interview, the meaning of the term “nonlinear vibration” was discussed. The undersigned attorney submitted that the term meant vibrations that contained multiple frequency components. He also argued that the Examiner’s interpretation of the term was unduly narrow in that her interpretation would limit “linear vibrations” to non-existent, theoretically purely single frequency vibrations. The Examiner stated that further evidence was needed to demonstrate the Applicant’s interpretation of “non-linear vibrations” as the Examiner was not in a good position to interpret the term based on her own knowledge.

No agreement was reached as a result of the interview.

### **Rejections Under 35 U.S.C. §103**

Claims 1 and 3-5 have been rejected under 35 U.S.C. §103(a) as unpatentable over *Wang* (U.S. 4,018,755), *Bloom* (U.S. 5,902, 224) and *Kirker et al.* (U.S. 6,706,180). Claims 1-5 have been rejected under 35 U.S.C. §103(a) as unpatentable over *Wang* (U.S. 4,018,755), *Bloom* (U.S. 5,902, 224), *Yokotsuka et al.* (U.S. 6,706,180) and *Kirker et al.* (U.S. 6,706,180). Claims 1, 3-5 and 38 have been rejected under 35 U.S.C. §103(a) as unpatentable over *Wang* (U.S. 4,018,755),

*Bloom* (U.S. 5,902, 224), *Kirker et al.* (U.S. 6,706,180) and *Tao* (U.S. 2002/0009506 A1).

Applicant respectfully draw the Examiner's attention to the fact that Claim 5 was cancelled in the Amendment submitted on 7 February 2008. The rejections of Claim 5 are therefore moot. Applicant further respectfully traverses these rejections as they apply to Claims 1-4 and 38.

Independent Claim 1 includes, among other thing, the feature of "a 18-33 kHz nonlinear vibration." Applicant respectfully submits that the Specification itself includes description that would make it at least reasonably clear to one of ordinary skill in the art that the term means vibrations containing multiple frequencies in the range of 18-33 kHz. For example, at p. 4, line 19-p. 5, line 5, the Applicant describes that under critical pressure, water is able to dissolve different substances at different frequencies. Using nonlinear vibration covering the specified frequency range, therefore, many types of the medicinal material can be extracted using water. At p. 9, line 23-p. 10, line 1, full-composition extraction is again discussed as an advantage of the invention. It is thus evident from the Specification that the nonlinear vibration must contain multiple useful (i.e., of strengths sufficient for the intended purpose of extracting substances) frequencies spanning a range (in the case of the claims in question, 18-33 kHz).

Applicant reiterates the arguments advanced in the Amendment filed on 10 September 2009 by incorporating those arguments herein by reference. In addition, Applicant respectfully submits herewith a declaration of Prof. Zhen-Gang Zhu. As Prof. Zhu points out, In a non-linear system, when an oscillatory driving force of a single frequency is applied, the vibrations it produces contains multiple frequencies even if the driving force contains only a single frequency. Furthermore, the mere presence of trace amounts non-linear vibrations in an otherwise linear vibration does not make the vibration non-linear in the view of those of ordinary skill in the technical field of this patent application, even though in terms of pure physics no system is perfectly linear.

Therefore, in light of the Specification and Prof. Zhu's testimony, Applicant respectfully submit that the term "18-33 kHz nonlinear vibration" should be interpreted to mean vibrations of multiple frequencies falling in the range of 10-33 kHz.

Given this interpretation, Applicant respectfully submits that the cited references, individually or in combination, fail to disclose or suggest applying "a 18-33 kHz nonlinear vibration" in combination with other limitations of Claim 1. Claim 1, and therefore all rejected claims, are allowable.

### Summary

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.



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Respectfully submitted,

MERCHANT & GOULD P.C.  
P.O. Box 2903  
Minneapolis, Minnesota 55402-0903  
(612) 332-5300

/Tong Wu/

Tong Wu  
Reg. No. 43,361  
TW/cjc